

What Is Claimed Is:

1. A system for classifying occupants of a vehicle comprising:  
at least one sound-wave receiver for an occupant classification,  
situated in a seat of the vehicle; and  
at least one sound-wave transmitter situated in the seat.
2. The system according to claim 1, wherein the at least one sound-wave transmitter and the at least one sound-wave receiver are reversible.
3. The system according to claim 1, wherein the at least one sound-wave transmitter and the at least one sound-wave receiver are piezoelectric.
4. The system according to claim 1, wherein the system is configured for propagation-time analysis.
5. The system according to claim 1, wherein the system is configured for determining a shift in frequency.
6. The system according to claim 1, wherein the at least one sound-wave transmitter and the at least one sound-wave receiver are situated horizontally in the seat.
7. The system according to claim 1, wherein the at least one sound-wave transmitter and the at least one sound-wave receiver are situated vertically.
8. The system according to claim 1, wherein the at least one sound-wave transmitter is situated in a pressure-free manner.